Navigation to this Page:

State of Utah and Utah Department of Health

For more information contact:

**UDOH Web Master** 801-538-6335

#### **DOHnet Home Page**

- . Policies & Procedures
- . . Information Administration

# **Web Standards**

Disclaimer: Privacy:

#### STATE OF UTAH

Information Technology Policy and Strategy Committee Architecture and
Standards Technical Advisory Group
Web Standards Work Group

January, 2001

#### UTAH DEPARTMENT OF HEALTH

Internet Steering Committee

Standards Subcommittee

Web Developers Group

March, 2001

A checklist for page content by type of web site or web page is available in PDF format here ---> STANDARDS CHECKLIST.

#### 1.0 Introduction

The standards and recommendations in this document are applicable to all State of Utah executive branch agency Web sites that are accessed by the public. State of Utah Intranet sites may be exempted from some of the accessibility provisions depending upon the needs of the user audience for the site. The provisions of these standards are designed to make State of Utah Web sites more accessible and to be compliant with generally accepted Web standards on a worldwide basis.

All statements below are State of Utah Web Standards except those proceeded by this UDOH logo which are Utah Department of Health (UDOH) web standards adopted as clarifications or enhancements to the state standards.

Web Site Presence Management - All web activity will be coordinated by the UDOH Web Coordinator and the Department Internet Steering Committee. The following three groups will coordinate web activity in each of their respective areas: Division / Office Web Designers, Web Application Developers and Web Technical Support Group. Responsibilities for each of these entities are outlined in UDOH Policies and Procedures and on the <u>UDOH Web Design Site</u>.

<u>Web Design Site</u> - A web site dedicated to UDOH's web presence will be maintained by the UDOH Web Coordinator and Steering Committee. This site will be the central point of reference for all web issues and solutions.

**2.0 Accessibility:** (Reserved by State ITPSC)

# 3.0 Content and Presentation

3.1 *State of Utah Identifier:* Each page in the Web site must have a State of Utah identifier, and an agency identifier identifiers can be either graphic or text representations. Examples of commonly used graphic state identifiers include the following:





Agency specific graphic logos and logotypes are another acceptable method for identifying the Web site as a State of Utah agency site.

Text identifiers commonly include the phrase "State of Utah" and are often followed or preceded by the name of the agency, such as "Governor's Office of Planning and Budget", or "Utah State Library Division" followed by the department name "Department of Community and Economic Development." Text messages should accomplish the purpose of identifying the Web site as a State agency site. No specific naming standards are required.

UDOHLogoor Text Identification - Each page in the Web site, with the possible exception of those generated automatically by a UDOH Internet feature such as displayed reports from an on-line query or PDF file, must have one of the following logos or text:

- 1) Complete UDOH logo, (with Utah Department of Health text) or
- 2) Triangle section of the UDOH logo (without text)
- 3) Text UDOH or Utah Department of Health
- ( A web site of UDOH Logos is available at: <a href="http://www.health.state.ut.us/dohnet/pio/LOGOS/">http://www.health.state.ut.us/dohnet/pio/LOGOS/</a>.)
- 3.2 Home Page Links: Each site, including but not limited to agency and division sites must link back to their own home page for consistency in site navigation.
- 3.3 State of Utah Home Page Link: Each agency Web site must have a link to the State of Utah Home Page at www.state.ut.us or alternatively to www.eutah.org. This link can be a textual reference such as "State of Utah Web Site" or a graphic identifier as illustrated in section 3.1.



UDOH Home Page Links - Each Division/Office page must have a link to the Utah Department of Health Home Page www.health.state.ut.us and can be textual or graphic as indicated above.

3.4 Contact Information: Each agency home page must contain contact information including but not limited to: emails, phone numbers and a street addresses for the agency. Contact information graphics or hyperlinks that lead the user to this information are also acceptable.



Contact Information and Help Messages - Each Division/Office home page must contain the information

Help Messages - Each Division/Office and Program home pages must contain a "Who to Contact" phrase including the name, phone number and E-mail address of a person or position who can answer questions or respond to inquiries about the web site.

3.5 Disclaimer: Agency Web sites should provide a disclaimer for the site and for each page as deemed necessary by agency management. Some agencies may require specific types of disclaimers based upon site content. The disclaimer approved by the ITPSC is included in Appendix A. and at http://www.eutah.org/disclaimer.html.



UDOH Disclaimer - The wording and the link to the page described below must be on every Division / Office index or home page and on any other page deemed necessary by agency management:

Wording: "Liability Disclaimer:" or "Disclaimer:" or "This Utah Department of Health web site is designed for..."

*Link*: http://www.health.state.ut.us/html/disclaimer.html

3.6 *Privacy Statement:* Agency Web sites should provide a privacy statement for the site and for each page as deemed necessary by agency management. The privacy statement approved by the ITPSC is included in Appendix B. and at http://www.eutah.org/privacy.html.

*UDOH Privacy Statement* - The wording and the link to the page described below must be on every Division/Office index or home page and on any other page which may require a legal description of the information gathered from UDOH web site users and what we do with this data, or as deemed necessary by agency management:

Wording: "Privacy:" or "Privacy Policy:"

*Link*: <a href="http://www.health.state.ut.us/html/privacy.html">http://www.health.state.ut.us/html/privacy.html</a>

3.7 Meta Tags: Each page of the Web site should have title, author, description, and keyword Meta tags as a minimum standard.

Government Information Locator Service/System (GILS) Meta Tags - Each page on UDOH web sites should have each of the current GILS metatags. (See Utah GILS Project web site for details, at: <a href="http://www.utah.org/gils/">http://www.utah.org/gils/</a>)

3.8 Link Verification: Links should be checked regularly to maintain accuracy and to avoid user frustration with broken links.

3.9 Site Search Capabilities: Each agency Web site should have a search engine specific to the agency site. Yeehaw or other 3rd party search engines can be utilized.

Alphabetical Listing - All UDOH web sites will use and link to the UDOH alphabetical listing of sites and resources, known as the AtoZ directories, which are found on the UDOH Internet and DOHnet sites. Changes to these directories will be submitted to the UDOH Web Master, who will include the changes in the next publication of the directory.

Interactive Organizational Chart - All UDOH web sites will use and link to the UDOH Interactive Organizational Chart which are found on the UDOH Internet and DOHnet sites. Changes to these charts will be submitted in a timely manner to the UDOH Web Master, who will include the changes in the next publication of the chart.

Navigation Bars - Each page on the DOHnet site must use the current, official navigation bar associated with the site. Pages that are generated dynamically will normally not need these navigation bars, unless the page can be accessed directly. (Navigation Bars for UDOH Internet Sites - Reserved by UDOH)

- 3.10 Agency Information: Each agency Web site should have an "about" section that describes the functions of the agency and the services provided.
- 3.11 Copyright (Agency Produced Information): Most state produced publications and Web materials are public domain and available for use by others without restriction. Exceptions may include materials produced under outside contracts where the contractor retains copyright.
- 3.12 *Copyright (Fair Use):* Agencies are advised to exercise caution in using digital material downloaded from the Internet in producing their Web sites, because there is a mix of works protected by copyright and works in the public domain on the Web. All agencies will abide by national and international copyright laws.

# 4.0 Development and Site Implementation

- 4.1 Communication: When agencies make changes to URL addresses on agency Web sites, other state Web masters, and eUtah should be notified. Change notifications are provided to prevent broken links on sites linking to agency pages. Notification can be accomplished by publishing URL changes to the Web Masters List Serve.
- 4.2 Content Approval: Agency Web sites should have a formal process in place for content approval by appropriate agency management. Agency directors are ultimately responsible for all Web content on the agency site.



Content Management - Each Division/Office web site will have a process described in 4.2 above, and Division/Office and program directors are ultimately responsible for all web content on her/his site.

4.3 Staging: Agencies should use staging sites as a part of the site development and approval process.



Staging of New and Redesigned Sites - Before launching a new web site or redesign of an old site, the site and all its features will be staged and have a review period of at least one week.

4.4 Web Development Tools: The State of Utah utilizes a wide range of tools for Web site development. Tool selection is at the option of the agency. ITS supports Web application server development tools from Sun<sup>TM</sup>, IBM<sup>TM</sup>, and Oracle<sup>TM</sup> on an enterprise level.



Standardized Web Design Methodology - All web resources will be developed using the UDOH Web Design planning tool "Blueprint for Web Development" or another methodology specific to each Division / Office.



Use of Web Site Templates - All Department programs publishing to the UDOH Intranet (DOHnet) will use the approved site templates. (Internet Site Templates - Reserved)

Web Site Roles Designated and Allowed Resources - Web site designers, web application developers and content contributors are to be designated by Division/Office directors. Web design and editing functions are being performed by staff on a part-time, as needed basis, therefore, managers are to allow staff the time and resources for this function. Performance Plans for these individuals are to include appropriate web functions.

#### 5.0 Reporting and Monitoring

- 5.1 Web Site Statistics: Agencies should monitor Web site usage. WebTrends<sup>TM</sup> administered by Information Technology Services (ITS) can be utilized by agencies to produce detailed site reports. Other similar reporting environments are available in some agencies. Each site should maintain statistics on the following:
  - Number of hits by units of time.
  - Number of user sessions.
  - Duration of user sessions.
  - Browser types and distribution using the Agency Web site.

Web Projects Reported to Steering Committee - All web projects will be reported to the Internet Steering Committee and any other Department review committee required by UDOH Policy, for review and approval before the web site or application is launched. The Projects web site will be used and maintained by the Division, Office and Program web designers and developers to meet the requirements of this section.

# **6.0 Site Hosting**

- 6.1 Web Site Backups: All Web sites should be backed up on a daily or more frequent basis. Plans for recovery of the Web site should be documented and approved by agency management.
- 6.2 Web Site Hosting: Agencies can host Web sites within their own server environment or sites can be hosted by ITS. In either cases provision should be made for a high reliability and high availability server environment. Agency Web sites should be available on a 24 X 7 basis.

Division / Office Web Site Hosting - Divisions, Offices and Programs can host web sites within their own server environment with approval by the Web Technical Support Group and the Internet Steering Committee.

6.3 Web Site Server Reliability: Web Sites must be monitored for reliability and accessibility.

6.4 Web Site Server Accessibility: Agency Web sites are to be accessible to State search engines such as Yeehaw.

Changes to Central Servers Coordinated - All changes to web server software, connections, etc., required by a new web feature needed by an Division or Office will be coordinated by the OIT Web Technical Support staff. Divisions and Office web designers needing new features are to communicate these requests in a timely manner to the UDOH Web Coordinator.

# 7.0 Site Security

- 7.1 *Public Key Infrastructure (PKI):* All digital signature applications required on agency Web sites should use approved Digital Signature Trust (DST) certificates and related development and implementation tools.
- 7.2 State Internet Security: The State of Utah uses SSL certificates for encryption requirements on public and Intranet Web sites. All agency servers should be deployed behind a secure firewall environment. Enterprise Web servers are protected by a Cisco PIX firewall. SiteMinder<sup>TM</sup> is utilized as an authentication mechanism for public user groups that require authentication. Other specialized authentication approaches for public users may be implemented at the option of the agency.
- 7.3 State Intranet (InnerWeb) Security: The State of Utah has standardized on SiteMinder™ as a single sign-on (SSO) and authentication environment for InnerWeb sites and Web applications. All agency InnerWeb sites and applications are encouraged to utilize this security environment. Minimum-security levels require an NDS login and password.



Confidentiality, Security and Privacy - (Reserved)

### 8.0 User Interface

- 8.1 *Browser Access:* All agency Web sites must be accessible using current distributed versions of Netscape, Internet Explorer and AOL as minimum browser environments. Agencies should design sites to use the most common browser environments used by the target audience for the Web site.
- 8.2 Page Formatting: Agency Web pages should be viewable without horizontal scrolling on an 800 X 600 pixel screen display unless the page is specifically designed for horizontal scrolling such as panoramic pictures, maps, and other large format documents.
- 8.3 Page Size: Page sizes should be scaled to provide less than 8-second page downloads when tested against the most

prevalent access environment of the target audience for the Web site.

8.4 *Plug-ins*: Agency Web sites that require browser plug-ins such as Real Video<sup>TM</sup>, Adobe Acrobat Viewer<sup>TM</sup>, etc. should identify the plug-in required on their Web site and provide a link to where the user can download the plug-in.

8.5 Cookie Requirements: Agency Web sites with public audiences that do not require authentication should generally avoid using cookies. InnerWeb sites for agency use and public Web sites requiring user authentication and tracking should use non-persistent cookies. Agency personnel using the State InnerWeb environment must have cookies enabled in their browser configurations.

8.6 JavaScript: Many State Web applications use JavaScript and/or Java applets on the Web site. All browser versions in use by State agencies must be Java enabled to utilize either JavaScript or Java element features on the Web site. This function must not be disabled on Agency employee browser configurations.

Domain Names Coordinated by UDOH Web Master - All special Internet Domain Names must be coordinated by UDOH Web Master and staff, in concert with state ITS staff. Internet Domain Name applications are to be forwarded by email to the UDOH Web Master who will submit the applications through OIT and ITS processes. Successful Domain Naming will be communicated in a timely manner to the requesting agency after proper technical testing and coordination. Domain Name registrars will bill the requesting UDOH or the agency directly for the Domain Name fees. (The Domain Name application and information can be found at: <a href="http://www.health.state.ut.us/dohnet/design3/html/instdomainname.html">http://www.health.state.ut.us/dohnet/design3/html/instdomainname.html</a>.)

The Yale Style Guide Used - All web designers are encouraged to use this excellent guide for design of web sites. It includes the concepts of publishing outlined in the UDOH web design construct. (This professionally researched and published guide can be found at: <a href="http://info.med.yale.edu/caim/manual">http://info.med.yale.edu/caim/manual</a>.)

*UDOH Organize Sites By Function as Well as By Organization* - All web sites should be organized so that the uninitiated web user will be able to find what he or she is looking for quickly, based on what we do, NOT necessarily how we are organized, and without requiring a search engine for common topics.

# Appendix A. Web Site Disclaimer Statement



*UDOH Liability Disclaimer Used* - UDOH has its own liability disclaimer which must be used as outlined in paragraph 3.5 UDOH above.

(State of Utah - Approved by the ITPSC, November 17, 1998)

#### **Appendix B. Privacy Statement**



*UDOH Privacy Policy Used* - UDOH has its own privacy policy which must be used as outlined in paragraph 3.6 UDOH above.

(State of Utah - As approved by the ITPSC, January 20, 2000)

#### **Appendix C. Term Definitions**

**Agency Web Site:** An agency server location that contains Web pages and other files which is online to the Internet 24 hours a day. Agency Web sites are the responsibility of the hosting agency. Sites may be hosted by the agency or on an enterprise level at Information Technology Services (ITS).

**Alt Tag:** (Alternate Text Tag) allows the Web site developer to specify alternate text to display in place of the image when image-display is disabled or not available in the Web browser. Some Web browsers also display the alternate text while the image is loading.

**AOL:** (America Online, Inc., www.aol.com) is the world's largest online information service with access to the Internet, e-mail, chat rooms and a variety of databases and services.

**Cookie:** Data created by a Web server that is stored on a user's computer is a persistent cookie. A non-persistent cookie stores data in memory and disappears after a pre-set time limit or when the browser is closed. Cookies provide a way for the Web site to keep track of a user's patterns and preferences and, with the cooperation of the Web browser, to store them on the users own hard disk. The cookies contain a range of URLs (addresses) for which they are valid. When the browser encounters those URLs again, it sends those specific cookies to the Web server.

CSS: (Cascading Style Sheet) is a style sheet format for HTML documents endorsed by the World Wide Web Consortium.



**Department Web Coordinator** - A person at the Department level assigned to coordinate UDOH's Internet and Intranet presence. Detail of this person's role and responsibility are outlined in the UDOH Web Design site.



*Division / Office Web Site* - An Division web location that contains Web pages and other files which is online to the Internet 24 hours a day. Division / Office Web sites are the responsibility of the Division or Office agency.

e-Utah: e-Utah is the official Web site of the State of Utah.

**Home Page:** The first page retrieved when accessing a Web site. It serves as a table of contents to the rest of the pages on the site or to other Web sites.

**HTML:** (HyperText Markup Language) is the document format used on the World Wide Web. Web pages are built with HTML tags, or codes, embedded in the text. HTML defines the page layout, fonts and graphic elements as well as the hypertext links to other documents on the Web.

**Image Map:** A single picture image that is logically separated into areas, each of which is used to select a different option or display a different message when clicked. It is widely used on the Web to provide a navigation bar to link to other topics (pages) on the site.

InnerWeb: The official State of Utah Intranet site accessible by all agencies of State government.

Internet Steering Committee - A group of persons designated by the Office of the Executive Director assigned to oversee and direct UDOH's Internet and Intranet sites and lead the Department's web initiatives. Detail of this committee's roles and responsibilities are outlined in the <u>UDOH Web Design</u> site.

**IntraNet Site:** An internal agency or statewide internal Web site that serves the employees of the enterprise. Although intranet pages may link to the Internet, an intranet is not a site accessed by the general public.

**ITPSC:** (Information Technology Policy and Strategy Committee) is the committee designated in the *Utah Code 63D-1-302* to "evaluate and approve or disapprove information technology policies, procedures, and standards to govern the operation of

information technology" in the executive branch of government.

**Java:** A programming language for writing client and server applications for the Web. Java programs can be called from within HTML documents or launched stand-alone. When a Java program runs from a Web page, it is called a "Java applet." When a Java program is run on the Web server, it is called a "servlet."

**JavaScript:** A popular scripting language that is widely supported in Web browsers and other Web tools. It deals mainly with the elements on the Web page. On the client, JavaScript is maintained as source code embedded into an HTML document. On the server, it is compiled into bytecode (intermediate language), similar to Java programs.

Link: An address (URL) to another document on the same server or on any remote server.

**Meta Tag:** An HTML tag that identifies the contents of a Web page. Using a <meta name=" " content=" "> format, meta tags contain such things as a general description of the page, and keywords for search engines.

**PIX:** A family of network firewalls from Cisco. PIX units are high-performance, stand-alone devices that contain their own embedded operating systems.

**PKI:** (Public Key Infrastructure) is a system for publishing the public key values used in public key cryptography. Also a system used in verifying, enrolling, and certifying users of a security application. All PKIs involve issuing public key certificates to individuals, organizations, and other entities and verifying that these certificates are indeed valid.

**SISC:** (State Information Security Committee) is a subcommittee of the ITPSC responsible for overall State of Utah security policy and related security architecture.

SiteMinder<sup>TM</sup>: A software product that enables management of user access to Web sites.

**URL:** (Uniform Resource Locator) is the address that defines the route to a file on the Web or any other Internet facility.

**W3C:** (World Wide Web Consortium, www.w3.org) is an international industry consortium founded in 1994 to develop common standards for the World Wide Web.

**Web:** In the context of this document Web refers to an Internet facility that links documents locally and remotely. Public (Internet) and private (Intranet) environments are considered as the Web unless referenced separately.

**Web Application Developers Group** - A group of persons designated by the Division and Office Directors assigned to develop web applications in each Division / Office. Detail of this group's roles and responsibilities are outlined in the UDOH Web Design site (Reserved).

**Web Designers Group** - A group of persons designated by the Division and Office Directors assigned to oversee and direct each Division / Office Internet and/or Intranet site development and web initiatives. Detail of this group's roles and responsibilities are outlined in the <u>UDOH Web Design</u> site.

**Web Technical Support Group** - A group of technologists designated by the Office of Information Technology assigned to mange and direct UDOH's Internet and Intranet servers and network. Detail of this committee's roles and responsibilities are outlined in the <u>UDOH Web Design</u> site.

**WebTrends**<sup>TM</sup>: A software product that provides management information and statistics on Web site utilization and performance.

**XML:** (Extensible Markup Language) is an open standard for describing data from the W3C. It is used for defining data elements on a Web page and business-to-business documents. It uses a similar tag structure as HTML; however, whereas

HTML defines how elements are displayed, XML defines what those elements contain.

Yeehaw: A search engine provided by the State for use with State agency Web sites.

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